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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/001,762	10/31/2001	Rainer Treptow	DT-6016	4302
30377	7590	03/29/2004	EXAMINER	
DAVID TOREN, ESQ. SIDLEY, AUSTIN, BROWN & WOOD, LLP 787 SEVENTH AVENUE NEW YORK, NY 10019-6018			HANDY, DWAYNE K	
			ART UNIT	PAPER NUMBER
			1743	

DATE MAILED: 03/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/001,762

Applicant(s)

TREPTOW, RAINER

Examiner

Dwayne K Handy

Art Unit

1743

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 October 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 and 34-63 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 34-45 and 50-63 is/are rejected.
- 7) ☒ Claim(s) 46-49 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 36-45, 51, 53, and 55-63 rejected under 35 U.S.C. 102(e) as being anticipated by Tagge (6,602,714). Tagge et al. teach an array for the high throughput synthesis and screening of compounds. The array contains a number of memory locations (wells) with conductive material for heating the material in the wells. The material is shown as both a film or metal layer (Figure 3, element 12), channels that are metallized for resistive heating (Figure 10, col. 18, lines 35-45) and individual elements in Figure 11 on the bottom heater/sensor array. The bottom stage of the stackable device of Figure 11 also shows temperature sensors (also disclosed in column 18, lines 47-58). Tagge discloses materials of construction for the device in column 8, lines 45-59 and includes plastic in the form of a microtiter plate. In column 23, line 58 through column 24, line 38, Tagge teaches the application of an alternating electrostatic potential that is measured by a variety of means including capacitive proximity sensors (col. 24, l. 20).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. Claims 2, 3, 34 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tagge et al. (6,602,714) in view of Shanks et al. (5,141,868). Tagge et al teach every element of claims 2, 3, 34 and 35 except for the conductive materials being made with conductive particles. Shanks et al. teach a chemical test device made of plastic and containing electrodes for analyzing materials in capillaries. The electrodes are formed on a substrate by incorporating conductive particles into the substrate (column 3, lines 12-68). It would have been obvious to one of ordinary skill in the art to combine the particle teaching from Shanks with the device of Tagge. One would integrate the conductive material into the structure of the device to eliminate the need for separate electrodes.

5. Claim 50 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tagge et al. (6,602,714). Tagge teaches every element of claim 50 except for cleaning and reusing the device. It would be obvious to one of ordinary skill in the art, however, to clean and reuse the device. This would save materials.

6. Claims 52 and 54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tagge et al. (6,602,714) in view of Eggers et al. Tagge et al. teach every element of claims 52 and 54 except for the conductive material being on the wall of plates. Eggers et al. teach a multisite detection apparatus for identifying molecular structures. The device is best shown in Figures 2A and 2B and includes electrode plates on both the walls and bottom of the wells. The electrodes allow for the electronic interrogation of the sites for the purpose of analyzing the contents of the wells. It would have been obvious to one of ordinary skill in the art to combine the teachings of Eggers with the device and methods of Tagge. One would place the electrode material on all well surfaces to insure that material in the wells contact the electrodes.

Allowable Subject Matter

7. Claims 46-49 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. In claims 46-48, applicant has claimed a method of using the device in which the volume of a sample is determined using a

Art Unit: 1743

capacitance measurement. This feature was not found in the prior art. Also, in claim 49, applicant recites the use of needles to apply an electrical current to the specimen carrier and to connect the capacitance measuring circuit to the measuring sensor. This feature was also not found in the prior art.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Bryan et al. (6,649,357) show an apparatus for identifying infectious agents by electrical analysis. McDevitt et al. (6,680,206) and Heller (6,582,660) show microtiter like devices with electrical components. Mroczkowski et al. (5,284,748) teach an electrical detection device with conductive particles.


9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dwayne K Handy whose telephone number is (571)-272-1259. The examiner can normally be reached on M-F 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill Warden can be reached on (571)-272-1267. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 1743

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DKH
March 21, 2004


Jill Warden
Supervisory Patent Examiner
Technology Center 1700